

What is claimed is:

1. A dynamic quantity sensor comprising:

5 a signal generating section for generating a detection signal having a signal level representing an applied dynamic quantity; and

a signal correcting section for correcting said detection signal produced from said signal generating section in such a manner that an unapplied level of said detection signal to be obtained when said dynamic quantity is not applied is equalized to a predetermined reference level,

10 wherein said dynamic quantity sensor has a failure mode in which an output of said signal generating section is fixed to said reference level, and

said signal generating section adjusts the detection signal in such a manner that said signal correcting section generates a large correction amount sufficient for the output signal from said signal correcting section to deviate from a failure judgment unable region including said reference level in case of failure corresponding to said failure mode.

2. The dynamic quantity sensor in accordance with claim 1, wherein said signal generating section comprises a sensor element having a movable portion causing a displacement in accordance with an applied dynamic quantity and a signal conversion circuit converting the displacement of said movable portion into said detection signal having the signal level representing said applied dynamic quantity.

25 3. The dynamic quantity sensor in accordance with claim 2, wherein said sensor element includes first and second capacitive elements cooperatively causing a complementary capacitance change in response to the displacement of said movable portion,

said signal conversion circuit includes a CV conversion circuit
30 converting the complementary capacitance change caused in said first and

second capacitive elements into a voltage change, and

the unapplied level of said detection signal is adjusted based on a capacitance ratio of said first and second capacitive elements under a condition that said dynamic quantity is not applied.

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4. The dynamic quantity sensor in accordance with claim 3, wherein the capacitance ratio of said first and second capacitive elements is adjusted by connecting a third capacitive element in parallel with one of said first and second capacitive elements.

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